We claim:

1. A method for measuring lens aberration, the method comprising:

providing a reticle having a test pattern, said test pattern having a first feature and a second feature, said first feature comprising a blazed grating capable of forming an asymmetric pattern of illumination energy passing therethrough, said asymmetric pattern rotationally oriented in a first direction;

exposing a photosensitive material to illumination energy passing through said first and second features to form a first feature image and a second feature image, respectively;

measuring a relative location of said first feature image with respect to said second feature image; and

computing a lens aberration parameter in accordance with said relative location.

2. The method of claim 1 wherein, during the step of exposing, said blazed grating projects a single beam.

3. The method of claim 1 wherein said test pattern comprises a box-in-box pattern having an inner box and an outer box.

4. The method of claim 3 wherein said first feature comprises one of said inner or outer box, and said first feature further comprises a blazed grating having a first orientation.

5. The method of claim 4 wherein said second feature comprises the remaining one of said inner or outer box, and said second feature further comprises a blazed grating having a second orientation different from said first orientation.

6. The method of claim 4 wherein said second feature comprises the

remaining one of said inner or outer box.

7. A method of measuring lens aberration comprising the steps:

providing a reticle having a plurality of test patterns, each of said test patterns including and associated with a first feature and a second feature, each of said first features having a blazed grating, wherein each of said blazed gratings has an associated grating orientation different from the orientation of each of the others of said plurality of test patterns;

exposing a photosensitive material through said plurality of test patterns to form a plurality of test images, each of said test images having a first image formed from said first feature and an associated second image formed from said second feature of the associated test pattern;

measuring a relative location of said first image with respect to said associated second image within each of said plurality of test images to obtain a set of relative locations wherein each of said relative locations in said set is associated with a different grating orientation; and

computing a lens aberration property in accordance with said set of relative locations.

8. The method of claim 7 wherein, during the step of exposing, each of said blazed gratings projects a single beam.

9. The method of claim 7 wherein said each of said test patterns comprises a box-in-box pattern having an inner box and an outer box.

10. The method of claim 9 wherein said first feature comprises one of said inner or outer box, and said first feature further comprises a blazed grating having a first orientation.

11. The method of claim 10 wherein said second feature comprises the remaining one of said inner or outer box.

12. The method of claim 1 wherein said test pattern further comprises

a first vertical feature and a second vertical feature, wherein said first vertical feature comprises a first vertical blazed grating having a first horizontal orientation, and wherein said second vertical feature comprises a second vertical blazed grating having a second horizontal orientation pointing in a direction opposite that of said first horizontal orientation,

said test pattern further comprising a first horizontal feature and a second horizontal feature, wherein said first horizontal feature comprises a first horizontal blazed grating having a first vertical orientation, and wherein said second horizontal feature comprises a second vertical orientation pointing in a direction opposite that of said first vertical orientation, and

said exposing further comprises forming first and second vertical images associated with said first and second vertical features, respectively, and forming said first and second horizontal images associated with said first and second horizontal features, respectively, and

said measuring further comprises measuring a vertical relative location and a horizontal relative location, and wherein

said lens aberration property comprises focus aberration.

13. The method of claim 1 wherein said test pattern further comprises

a box-in-box pattern having an outer box and an inner box nested on a common center point, wherein said outer box comprises

upper and lower horizontal elements and left and right vertical elements, said upper horizontal element comprising a blazed grating having an orientation pointing vertically upward, said lower horizontal element comprising a blazed grating having an orientation pointing vertically downward, said left vertical element comprising a blazed grating having an orientation pointing to the left, said right vertical element comprising a blazed grating having an orientation pointing to the right, and said inner box providing zero degree phase shift, and wherein

said exposing further comprises forming outer and inner box images associated with said outer box and said inner box, respectively, and

said measuring comprises determining center points of said outer and inner box images, and determining a shift of the center of said outer box image relative to the center of said inner box image, and wherein

said lens aberration property comprises coma.

14. A reticle for measuring lens aberration, the reticle comprising a test pattern having a first feature and a second feature, said first feature comprising a blazed grating capable of forming an asymmetric pattern of illumination energy passing therethrough and said asymmetric pattern rotationally oriented in a first direction.

15. The reticle of claim 14 wherein said blazed grating is capable of projecting a single beam.

16. The reticle of claim 14 wherein said test pattern comprises a box-in-box pattern.

17. A reticle for measuring lens aberration, the reticle comprising

a plurality of test patterns, each of said test patterns including and associated with a first feature and a second feature, each of said first features comprising a blazed grating capable of forming an asymmetric pattern of illumination energy passing therethrough, said asymmetric pattern having a rotational orientation different from the orientation of each of the other of said plurality of test patterns.

18. The reticle of claim 17 wherein each of said plurality of test patterns comprises a box-in-box pattern.

19. The reticle of claim 14 wherein said test pattern further comprises a first vertical feature and a second vertical feature, wherein said first vertical feature comprises a first vertical blazed grating having a first horizontal orientation, and wherein said second vertical feature comprises a second vertical blazed grating having a second horizontal orientation pointing in a direction opposite that of said first horizontal orientation,

said test pattern further comprising a first horizontal feature and a second horizontal feature, wherein said first horizontal feature comprises a first horizontal blazed grating having a first vertical orientation, and wherein said second horizontal feature comprises a second vertical orientation pointing in a direction opposite that of said first vertical orientation.

20. The reticle of claim 14 wherein said test pattern further comprises a box-in-box pattern having an outer box and an inner box nested on a common center point, wherein said outer box comprises upper and lower horizontal elements and left and right vertical elements, said upper horizontal element comprising a blazed grating having an orientation pointing vertically upward, said lower horizontal element comprising a blazed grating having an

orientation pointing vertically downward, said left vertical element comprising a blazed grating having an orientation pointing to the left, said right vertical element comprising a blazed grating having an orientation pointing to the right, and said inner box providing zero degree phase shift.